

## Quick Guide – Product and Installation

# Shallow IC 250

### Description

250mm diameter polypropylene inspection chamber for adoptable and non-adoptable applications. Compliant with Sewers for Adoption 7th edition [SfA7].

Single unit with integral shaft, for use with 110mm OsmaDrain system.

Shaft may be cut to length to achieve required invert depth.

### Applications

- ⦿ For above ground access and maintenance inspection of buried pipework up to 0.6 metres deep
- ⦿ For loading applications up to 15kN (1.5 Tonne)

### Key Dimensions

- ⦿ External shaft diameter: 250mm
- ⦿ Inlets/outlets: 110mm

### Key Features & Benefits

- ⦿ Fast, easy installation: no wet trades
- ⦿ Lightweight: no lifting equipment required
- ⦿ Shaft can be cut to required length
- ⦿ No additional trench excavation required

### Compliance

The Shallow Inspection Chamber complies with the following standards and regulations

- BS EN 13598-1: 2010 ♡
- SfA7 Typical Chamber Detail – Type 4: (to max. 0.6m depth only)
- Building Regulations – Part H1: Shallow only, to maximum depth 0.6m



Shallow Inspection Chamber assembly

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### Typical Installation of 250/315mm dia. Inspection Chambers

The following is a typical summary of the installation procedures required to install the Osma 250/315mm dia Inspection Chambers.

The Shallow and Multi-Base Inspection Chamber may be installed in the same minimum trench width as required for standard 110mm drainage pipework. NO extension of trench width is required.

All elements are lightweight: may be handled/installed by a single person.

#### Preparation

- Prepare and compact 100mm regulating bed of 'as dug' or granular material in trench bottom

#### Positioning/connection

- Position Base on regulating bed. Check outlet is facing in the correct direction
- Ensure all inlets/outlet are free from dirt or grit
- In the case of the Shallow Inspection Chamber, remove profile plug(s) for the side outlets required
- Use standard jointing sequence to connect 110mm OsmaDrain pipes to inlets/outlet

*NOTE: The main through channel MUST be used. Bends up to 45° may be used on any inlet or outlet.*

#### Cutting shaft – Shallow Inspection Chamber

- Cut shaft to approximate required height, using a fine-toothed saw, using the cutting guides shown on the Chamber unit

- Chamfer the cut end to approx. 15° using plain-toothed rasp or scraper

#### Shaft assembly – Multi-Base Inspection Chamber

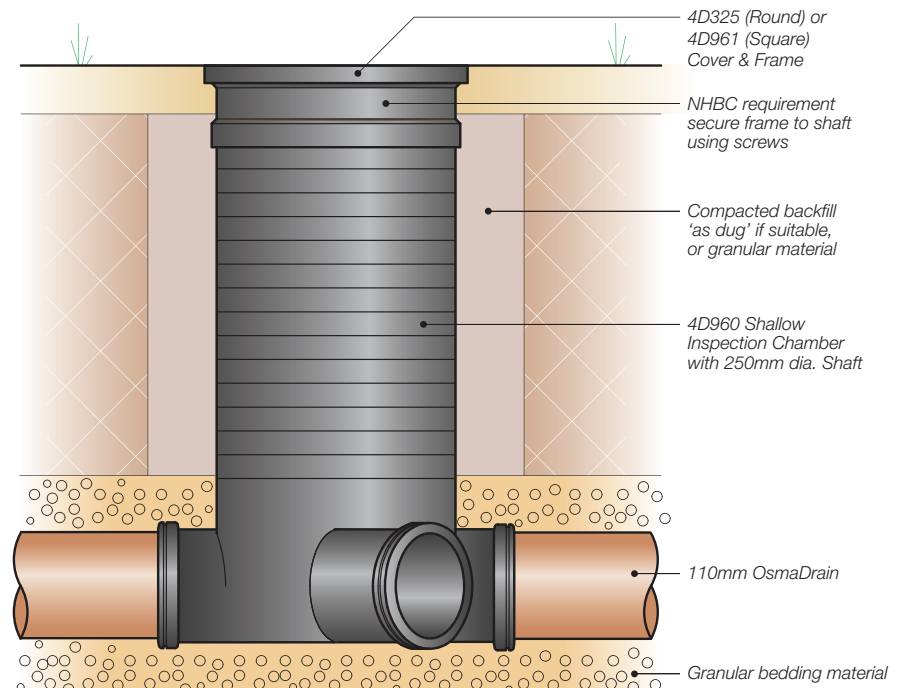
- Clean inside of Base socket and lubricate this entire area
- Position first shaft section into Base socket. Vertically push home manually
- Push-fit further shaft sections as required for invert depth. Ensure inside of each shaft section is pre-lubricated
- Cut final shaft section to approximate required height, using a fine-toothed saw. (Grooves at 30mm centres act as cutting guides)

#### Backfill trench

- Before starting backfill, cover top of shaft to prevent ingress of dirt or grit
- Select suitable sidefill – use 'as dug'. If not appropriate, use suitable granular material, similar to bedding material
- Avoid knocking shaft during backfilling – and keep free of debris
- Backfill to formation level. Then trim shaft to required height using fine-toothed saw

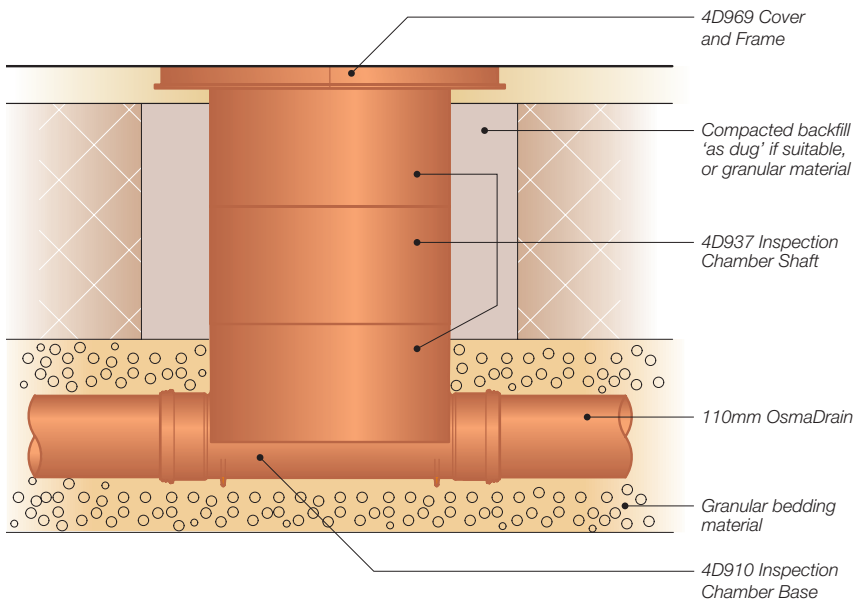
*NOTE: If finished ground level is not yet known, leave shaft proud of surface and keep open end covered until final completion.*

Figure 1: Typical installation detail: Shallow Inspection Chamber



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Figure 2: Typical installation detail: Multi-Base Inspection Chamber



### Cover and Frame: Installation onto/ into 250/315mm dia. Inspection Chambers

For green areas and pedestrian areas NOT\* subject to vehicle loading (See Figures 3 & 5).

EXAMPLE: 250mm Inspection Chamber in domestic gardens

- Trim shaft section at last stage of construction. Ensure unit is at correct height. Use cutting guides shown on chamber unit
- Prepare polypropylene Cover and Frame [4D325 or 4D961] for installation onto and/or into the shaft section:

[4D325]

- Clean and lubricate outside of shaft top
- Ensure sealing ring inside the frame section is seated correctly and free from dirt and grit
- Position the cover and frame socket over the shaft and push-fit home
- Fix frame to shaft using self-tapping screws (not provided)

[4D961]

- Clean and lubricate inside of shaft top
- Ensure sealing ring located on the outside of the frame section is seated correctly and free from dirt and grit
- Position the cover and frame spigot into the shaft and push-fit home
- Fix frame to shaft using self-tapping screws (not provided)

EXAMPLE: 315mm Inspection Chamber in domestic gardens

- ⦿ Trim shaft section at last stage of construction. Ensure unit is at correct height
- ⦿ Lubricate inside of top shaft section
- ⦿ Prepare polypropylene Cover and Frame [4D969] for installation into shaft: ensure pre-fitted ring seal is clean and not twisted
- ⦿ Position the cover and frame socket into the shaft section and push home
- ⦿ Fix frame to shaft using self-tapping screws (not provided)

\*For A15 applications subject to occasional loading up to 15kN (1.5 tonnes) (See Figures 4 & 6).

EXAMPLE: 250mm Inspection Chamber in domestic paths/patios

- ⦿ Leave top 150mm of shaft clear of backfill
- ⦿ Lay 150mm thick slab of pre-cast or in situ concrete around top of shaft section
- ⦿ Prepare polypropylene Cover and Frame [4D325 or 4D961] for installation onto and/or into the shaft section, as previously described

EXAMPLE: 315mm Inspection Chamber in domestic paths/patios

- ⦿ Leave top 150mm of shaft clear of backfill
- ⦿ Lay 150mm thick slab of pre-cast or in situ concrete around top of shaft chamber
- ⦿ Lubricate inside of top shaft section

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- ① Prepare polypropylene Cover and Frame [4D969] for installation into shaft: ensure pre-fitted ring seal is clean and not twisted
- ① Position the cover and frame socket into the shaft section and push home
- ① Fix frame to shaft using self-tapping screws (not provided)

[4D961]

- Clean and lubricate inside of shaft top
- Ensure sealing ring located on the outside of the frame section is seated correctly and free from dirt and grit
- Position the cover and frame spigot into the shaft and push-fit home
- Fix frame to shaft using self-tapping screws (not provided)

Figure 3: Installation detail – green areas (non-loaded)

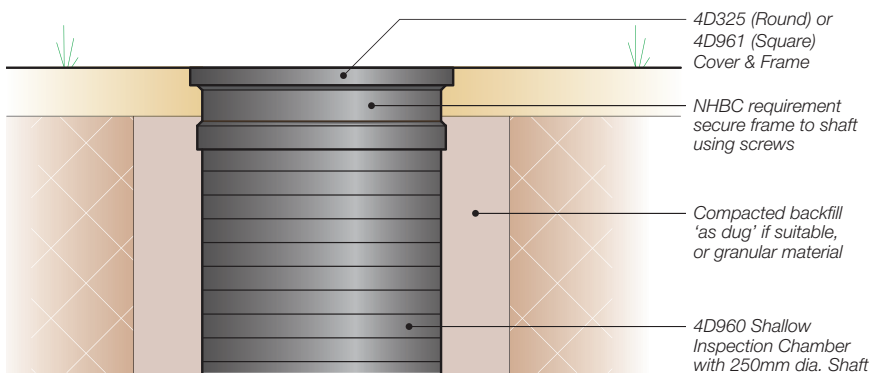
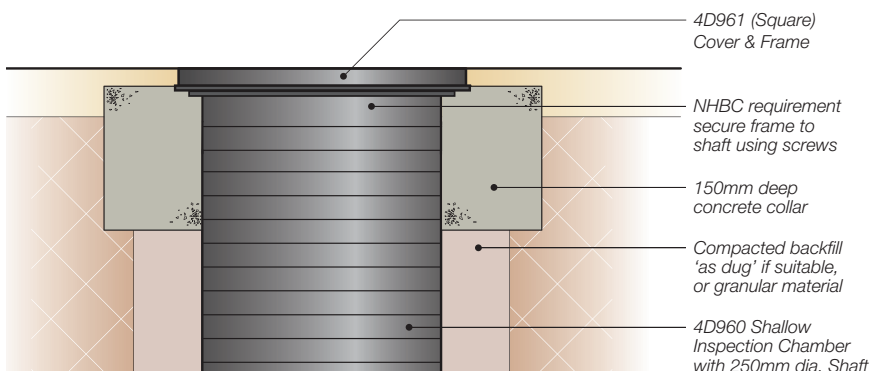


Figure 4: Installation detail A15 – areas subject to occasional vehicle loading up to 15kN (1.5 tonnes)



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Figure 5: Installation detail – green areas (non-loaded)

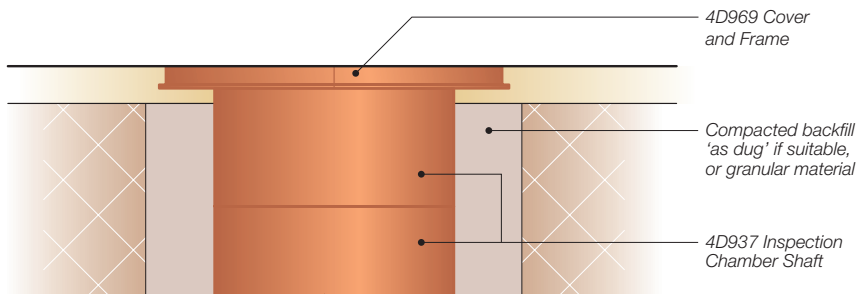


Figure 6: Installation detail A15 – areas subject to occasional vehicle loading up to 15kN (1.5 tonnes)

